

**REMARKS/ARGUMENTS**

Claims 12 and 40-42 have been canceled. Claims 1-10, 13-39 and 43-44 are pending in the application.

**Claim Rejections - 35 USC §103 – Yoshida and Nalbandian**

Claims 1-10, 13-39 and 43-44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (USPN 5,363,142) (hereinafter “Yoshida”) in view of ITU-R Studies on Spectrum Management by Albert Nalbandian (hereinafter “Nalbandian”). Applicant respectfully submits that the above-identified claims are patentable over Yoshida and Nalbandian.

Claim 1 recites:

A television tuner comprising:  
a country table listing a plurality of countries;  
multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and  
a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

Yoshida describes a method for changing microcomputer specifications installed in TV sets for the purpose of using the TV sets in different foreign countries. Regarding this method, Yoshida states:

A method for selecting the proper program corresponding to respective destinations of TV sets from many programs store in a microcomputer installed in said TV set, is characterized in that, the destination code identifying the country of destination is transmitted together with power on code from the remote controller which is essentially provided with said TV set, and said microcomputer selects said proper program prepared for said destination by receiving said destination code transmitted from said remote controller. (Yoshida, Abstract)

Thus, Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote controller. However, nothing in Yoshida describes how the TV set configures its operations after receiving the destination code. In particular, Yoshida fails to disclose or suggest a television tuner that includes a country table listing multiple countries and multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, as recited in Claim 1. Yoshida also fails to disclose or suggest a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

The Office Action concludes that Yoshida must have a table of channel-to-frequency mapping table of various countries in order to function as disclosed. (See Office Action, page 7). Yoshida describes initializing a TV set using a proper program corresponding to a destination code that is sent from a remote control. (See Yoshida, col. 3, line 39 to col. 4, line 12). Yoshida does not describe how the program initializes the TV set. In fact, the only description in Yoshida for configuring a TV set is by changing diode-jumping circuits in the TV set. (See Yoshida, col. 1, line 50 to col. 2, line 6). It is possible that the TV set

described by Yoshida may respond to the destination code by merely changing the diode-jumping circuits based on the code, without using any mapping table.

Since Yoshida does not disclose or suggest the use of any table, the Office Action can only arrive at its conclusion by combining Yoshida's method with materials from the Applicant's application. Applicant respectfully submits that such hindsight reconstruction is improper and that the rejection should be withdrawn.

The Office Action also argues that Nalbandian inherently discloses a country table that lists countries according to an ITU code. (See Office Action, page 8). Nalbandian mentions that the current structure of frequency allocation in the international level is represented by the Table of Frequency Allocation of the Radio Regulations. This table divides the radio frequency spectrum into frequencies bands for use by 40 different radio communication services. (See Nalbandian, Section 4.1). However, this table does not correlate channel numbers to corresponding frequencies for associated countries in a country table. Thus, the table described in Nalbandian is not equivalent to the channel-to-frequency mapping tables as recited in Claim 1.

The Table of Frequency Allocation described in Nalbandian is not applicable to the method described by Yoshida. Even if the two references can be combined, the combination is merely a method for transmitting a destination code together with a power on code to a TV set using a remote controller where the TV set is configured to operate within the frequency allocation assigned in the table in Nalbandian for the services provided by the TV set. However, this combination still fails to disclose or suggest the subject matter recited in Claim 1.

For the above-identified reasons, Applicant respectfully submits that Claim 1 is patentable over Yoshida and Nalbandian, alone or in combination. Given that Claims 2-4 depend from Claim 1, Claims 2-4 are also allowable for at least the same reasons.

Claim 5 recites:

A television tuning component for a television tuning system, comprising:  
a country table listing a plurality of countries; and  
multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country and selection of a channel in the channel-to-frequency mapping table maps to a corresponding frequency.

As discussed above, Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote controller but fails to disclose or suggest a country table listing multiple countries and multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, as recited in Claim 5. Nalbandian describes a table that represents international frequency allocation but also fails to describe the country table and the corresponding channel-to-frequency mapping tables in Claim 5.

For the above-identified reasons, Applicant respectfully submits that Claim 5 is patentable over Yoshida and Nalbandian, alone or in combination. Given that

Claims 6-10 depend from Claim 5, Claims 6-10 are also allowable for at least the same reasons.

Claim 13 recites:

A television tuning system comprising:  
tuner circuitry to tune to various television frequencies carrying television video signals;  
video decoder circuitry coupled to receive a television video signal from the tuner circuitry and to convert the television video signal to digital video data;  
a tuner module coupled to adjust the tuner circuitry to a particular television frequency;  
a video decoder module to decode the digital video data according to a particular video standard;  
wherein the tuner module has a country table listing a plurality of countries and multiple channel-to-frequency mapping tables that provide video standards and correlate channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and  
wherein the tuner module selects a channel-to-frequency mapping table based upon input of a particular country and outputs a video standard to the video decoder for use in decoding the digital video data, the tuner module further selecting a television frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel and outputting the selected television frequency to the tuner circuitry to cause the tuner circuitry to tune to the selected television frequency.

As discussed above, neither Yoshida nor Nalbandian discloses or suggests a country table listing multiple countries and multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table. Furthermore, nothing in Yoshida or Nalbandian discloses or suggests a video decoder module that decodes the digital

video data according to a particular video standard and multiple channel-to-frequency mapping tables that provide video standards, as recited in Claim 13. In fact, Yoshida and Nalbandian do not disclose or suggest any video standard and the use of such video standards to decode digital video data.

For at least the above-identified reasons, Applicant respectfully submits that Claim 13 is patentable over Yoshida and Nalbandian, alone or in combination. Given that Claims 14-18 depend from Claim 13, Claims 14-18 are also allowable for at least the same reasons.

Claim 19 recites:

A television tuning manager for a television tuner, the television tuning manager being implemented in software stored on a computer-readable storage medium, the television tuning device comprising:  
a country table listing a plurality of countries;  
multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country;  
a code segment to select a channel-to-frequency mapping table based upon input of a particular country; and  
a code segment to output a broadcast frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel.

As discussed above, although Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote controller, Yoshida fails to disclose or suggest a country table listing multiple countries and multiple channel-to-frequency mapping tables correlating channel

numbers to corresponding frequencies for associated countries in the country table, as recited in Claim 19. Nalbandian describes a table that represents international frequency allocation but also fails to disclose or suggest the country table and the corresponding channel-to-frequency mapping tables. Yoshida and Nalbandian also fail to disclose or suggest a television tuning device that includes code segments to select a channel-to-frequency mapping table based upon input of a particular country and to output a broadcast frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel, as recited in Claim 19.

For at least the above-identified reasons, Applicant respectfully submits that Claim 19 is patentable over Yoshida and Nalbandian, alone or in combination. Given that Claims 20-25 depend from Claim 19, Claims 20-25 are also allowable for at least the same reasons.

Claim 26 recites:

An application program interface for a television tuning system, the application program interface being embodied on a computer-readable medium and having methods for performing the following functions:

setting a current TV channel;  
retrieving the current TV channel;  
setting a country code;  
retrieving the country code;  
setting a storage index for regional channel to frequency mappings;  
and  
retrieving the storage index.

As discussed above, Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote

controller but fails to disclose or suggest multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies. Nalbandian describes a table that represents international frequency allocation but also fails to describe such corresponding channel-to-frequency mapping tables. In fact, neither Yoshida nor Nalbandian discloses or suggests any channel-to-frequency mapping. Thus, Yoshida and Nalbandian also fail to disclose or suggest an application program interface that has a method for performing “setting a storage index for regional channel to frequency mappings”, as recited in Claim 26. For at least the above-identified reasons, Applicant respectfully submits that Claim 26 is patentable over Yoshida and Nalbandian, alone or in combination.

Claim 27 recites:

An application program interface for a television tuning system, the application program interface being embodied on a computer-readable medium and having methods for performing the following functions:

retrieving all analog video TV standards supported by the tuning system;  
retrieving a current analog video TV standard in use;  
setting a current TV channel;  
retrieving the current TV channel;  
retrieving highest and lowest channels available;  
scanning for a precise signal on the current TV channel's frequency;  
setting a country code;  
retrieving the country code;  
setting a storage index for regional channel to frequency mappings;  
retrieving the storage index;  
retrieving a number of TV sources plugged into the tuning system;  
setting a type of tuning system;  
retrieving the type of tuning system;  
retrieving a current video frequency; and  
retrieving a current audio frequency.

As discussed above, neither Yoshida nor Nalbandian discloses or suggests an application program interface that has a method for performing “setting a storage index for regional channel to frequency mappings”, as recited in Claim 27. For at least the above-identified reasons, Applicant respectfully submits that Claim 27 is patentable over Yoshida and Nalbandian, alone or in combination.

Claim 28 recites:

A method comprising the following steps:  
receiving an ITU (International Telecommunications Union) code  
for a particular country; and  
selecting, based on the ITU code, a set of TV channel-to-TV  
frequency mappings for use in the particular country.

As discussed above, neither Yoshida nor Nalbandian discloses or suggests any channel-to-frequency mapping. Thus, Yoshida and Nalbandian also fail to disclose or suggest a method that includes the step of “selecting, based on the ITU code, a set of TV channel-to-TV frequency mappings for use in the particular country”, as recited in Claim 28. For at least the above-identified reasons, Applicant respectfully submits that Claim 28 is patentable over Yoshida and Nalbandian, alone or in combination. Given that Claims 29-31 depend from Claim 28, Claims 29-31 are also allowable for at least the same reasons.

Claim 32 recites:

A method comprising the following steps:  
receiving a reference to a country;

selecting, based on the country reference, a set of channel-to-frequency mappings correlating channels to corresponding TV frequencies in the country;  
receiving a channel; and  
selecting, based on the channel, a TV frequency that maps to the channel.

As discussed above, although Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote controller and Nalbandian describes a frequency allocation table, neither of the references discloses or suggests channel-to-frequency mapping. Thus, Yoshida and Nalbandian also fail to disclose or suggest a method that includes the step of “selecting, based on the country reference, a set of channel-to-frequency mappings correlating channels to corresponding TV frequencies in the country” and “selecting, based on the channel, a TV frequency that maps to the channel”, as recited in Claim 32.

For at least the above-identified reasons, Applicant respectfully submits that Claim 32 is patentable over Yoshida and Nalbandian, alone or in combination. Given that Claims 33-39 depend from Claim 32, Claims 33-39 are also allowable for at least the same reasons.

Claim 43 recites:

A tuning system comprising:  
a country table listing a plurality of countries; and,  
multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country, and wherein said tuning system adjusts to a particular

video standard based on a selected channel from one of the multiple channel-to-frequency mapping tables.

As discussed above, neither Yoshida nor Nalbandian discloses or suggests a country table listing multiple countries and multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, as recited in Claim 43. For at least the above-identified reasons, Applicant respectfully submits that Claim 43 is patentable over Yoshida and Nalbandian, alone or in combination.

Claim 44 recites:

One or more computer-readable media having computer readable instructions thereon which, when executed by a computer, cause the computer to:

- receive data regarding a selected country;
- map to channels available for the selected country;
- receive data regarding a selected channel;
- map to an appropriate video standard based on at least one of the selected country and selected channel; and,
- format a tuning component to the appropriate video standard.

As discussed above, Yoshida describes a method for transmitting a destination code together with a power on code to a TV set using a remote controller and Nalbandian describes a table that represents international frequency allocation. However, neither Yoshida nor Nalbandian discloses or suggests the use of a video standard. Thus, Yoshida and Nalbandian also fail to disclose or suggest computer-readable media having computer readable instructions that causes the computer to “map to an appropriate video standard based on at least one

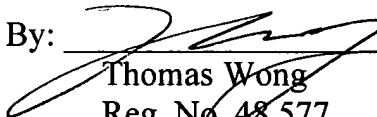
of the selected country and selected channel” and “format a tuning component to the appropriate video standard”, as recited in Claim 44. For at least the above-identified reasons, Applicant respectfully submits that Claim 44 is patentable over Yoshida and Nalbandian, alone or in combination.

**CONCLUSION**

Claims 1-10, 13-39 and 43-44 are in condition for allowance. Applicant respectfully requests the issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

Date: 9-2-2004

By:   
Thomas Wong  
Reg. No. 48,577  
(206) 315- 4001 X106